Release notes for ENDF/B Development e-056_Ba_000 evaluation



October 13, 2016

• fudge-4.0 Warnings:

1. Mislabled emitted particle Reading ENDF file: ../e-056_Ba_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0

2. FIXME: Generic fudge unimplemented message reaction label 1: e- + Ba + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

3. FIXME: Generic fudge unimplemented message reaction label 2: e- + Ba [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

• fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree reaction label 0: e- + Ba [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

2. Calculated and tabulated thresholds don't agree reaction label 1: e- + Ba + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

3. Calculated and tabulated thresholds don't agree reaction label 2: e- + Ba [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

4. Calculated and tabulated thresholds don't agree reaction label 3: e- + e- + Ba1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 37449. eV!

5. Calculated and tabulated thresholds don't agree reaction label 4: e- + e- + Ba2s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5960.8 eV!

6. Calculated and tabulated thresholds don't agree reaction label 5: e- + e- + Ba2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5630.3 eV!

7. Calculated and tabulated thresholds don't agree reaction label 6: e- + e- + Ba2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5243.4 eV!
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- 8. Calculated and tabulated thresholds don't agree reaction label 7: e- + e- + Ba3s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1273.4 eV!
- 9. Calculated and tabulated thresholds don't agree reaction label 8: $e^- + e^- + Ba3p1/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1132.2 eV!
- 10. Calculated and tabulated thresholds don't agree reaction label 9: e- + e- + Ba3p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1057. eV!
- 11. Calculated and tabulated thresholds don't agree reaction label 10: e- + e- + Ba3d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 806.64 eV!
- 12. Calculated and tabulated thresholds don't agree reaction label 11: e- + e- + Ba3d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 790.49 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 12: $e^- + e^- + Ba4s1/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 256.35 eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 13: e- + e- + Ba4p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 204.21 eV!
- 15. Calculated and tabulated thresholds don't agree reaction label 14: e- + e- + Ba4p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 188.35 eV!
- 16. Calculated and tabulated thresholds don't agree reaction label 15: e- + e- + Ba4d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 102.16 eV!
- 17. Calculated and tabulated thresholds don't agree reaction label 16: e- + e- + Ba4d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 99.459999999999 eV!
- 18. Calculated and tabulated thresholds don't agree reaction label 17: e- + e- + Ba5s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 38.39 eV!

- 19. Calculated and tabulated thresholds don't agree reaction label 18: e- + e- + Ba5p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 24.3 eV!
- 20. Calculated and tabulated thresholds don't agree reaction label 19: e- + e- + Ba5p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 22. eV!
- 21. Calculated and tabulated thresholds don't agree reaction label 20: e- + e- + Ba6s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4.64 eV!
- xsectplotter Warnings:
 - 1. Mislabled emitted particle $Error: ZAP \ messed \ up$

stderr while processing crossSection

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0 \dots [4 more lines]